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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/595,074      | 06/16/2000  | Kevin Wilson         | 55092 CCD           | 9748             |

7590 09/13/2002

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EXAMINER

IMAM, ALI M

ART UNIT

PAPER NUMBER

3737

DATE MAILED: 09/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/595,074

Applicant(s)

WILSON ET AL.

Examiner

Ali Imam

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 6/17/02 (Amendment).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Mendlein et al. (US 6,013,031). Mendlein teaches in col. 1, line 57- col. 3, line 50, a method and apparatus for determining bone characteristics by steps and structures for disposing a pair of ultrasonic transducers (col. 2, line 47) made of polyvinylidene fluoride (col. 8, lines 45-47), ultrasonically coupling both transducers to a bone-containing animal portion (see Fig. 7C), electrically emerging the transducers to transmit by one and receive by the other transducer ultrasonic signals, detecting the signals and evaluating the signals for determining bone characteristics. In col. 1, line 17, Mendlein teaches that the method is being used for non-invasive assessment of bone status in patients with osteoporosis. Piezoelectric transducer made of copolymer, e.g., copolymers of vinylidene fluoride and trifluoroethylene, is well known in art of ultrasonic measurement systems. See for example: col. 7, lines 60-65 of Proudian, deceased et al. (US 4,917,097); the abstract of Ohigashi et al. (US 4,424,465); col. 2, line 18 of Van der Spiegel et al. (US 5,254,504); col. 10, lines 28-31 of Hashimoto et al. (US 5,307,816); col. 5, line 4 of Dias et al. (US 5,511,296); col. 6, line 61 of Finsterwald et al. (US 6,038,752); col. 4, line 50 of Toda (US 6,307,302); or col. 13, line 33 of Shimoda et al. (US 6,420,190).

***Response to Arguments***

3. Applicant's arguments filed 6/17/02 have been fully considered but they are not persuasive. The examiner respectfully disagrees that applicant's copolymer transducer is a novel feature. Piezoelectric transducer made of copolymer, e.g., copolymers of vinylidene fluoride and trifluoroethylene, is well known in art of ultrasonic measurement systems. See for example: col. 7, lines 60-65 of Proudian, deceased et al. (US 4,917,097); the abstract of Ohigashi et al. (US 4,424,465); col. 2, line 18 of Van der Spiegel et al. (US 5,254,504); col. 10, lines 28-31 of Hashimoto et al. (US 5,307,816); col. 5, line 4 of Dias et al. (US 5,511,296); col. 6, line 61 of Finsterwald et al. (US 6,038,752); col. 4, line 50 of Toda (US 6,307,302); or col. 13, line 33 of Shimoda et al. (US 6,420,190). Applicant did not argue about other limitations of the claims except for "copolymer transducer". Therefore, it is considered that the Mendlein patent teaches all the limitations of the claimed invention.

4. In response to applicant's argument that the prior art does not mention to use the transducer to test bone, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3737

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

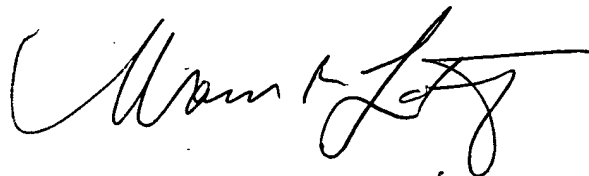
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Imam whose telephone number is 703-305-0028. The examiner can normally be reached on Mon. - Th., 8:00- 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marvin Lateef can be reached on 703-308-3256. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-0758 for regular communications and 703-308-0758 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.



Ali Imam  
September 6, 2002



Marvin M. Lateef  
Supervisory Patent Examiner  
Group 3700